

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**South Central Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Virginia Marble Manufacturers, Inc.  
Brunswick Avenue, Lunenburg County, Kenbridge, Virginia  
Permit No. (SCRO) 30914

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Virginia Marble Manufacturers, Inc. has applied for a Title V Operating Permit for its Brunswick Avenue, Kenbridge facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: August 18, 2003

Air Permit Manager: \_\_\_\_\_ Date: \_\_\_\_\_  
*Air Permit Manager*

Regional Director: \_\_\_\_\_ Date: \_\_\_\_\_  
*Regional Director*

## **FACILITY INFORMATION**

### Permittee

Virginia Marble Manufacturers, Inc.  
P. O. Box 766  
Kenbridge, VA 23944

### Facility

Virginia Marble Manufacturers, Inc. - Plant #2  
Brunswick Avenue

AIRS ID No. 51-111-00019

## **SOURCE DESCRIPTION**

SIC Code: 3088 – Plastic Plumbing Fixtures

Virginia Marble Manufacturers, Inc. is a manufacturer of cultured marble (from marble dust and polyester resin) covered by Standard Industrial Classification (SIC) Code 3088. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The annual raw material throughput limitations are based on producing 7,905.2 tons of cultured marble per year.

The facility is a Title V major source of styrene. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was previously permitted under a Minor NSR Permit issued on March 19, 1994, and amended on July 16, 1996, February 20, 1998, June 12, 1998, and April 14, 2003.

## **COMPLIANCE STATUS**

The facility is inspected at least once every other year. The full compliance inspection report issued on August 8, 2002 stated that the facility was in compliance.

## **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at this facility consist of the following :

See permit Condition II.A.

## EMISSIONS INVENTORY

A copy of the 2002 annual emission update is attached. Emissions are summarized in the following tables.

2002 Actual Emissions

	2002 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Marble manufacturing	26.9				
Total	26.9				

2002 Facility Hazardous Air Pollutant Emissions

Pollutant	Hazardous Air Pollutant Emission in Tons/Yr
Styrene	26.8

## EMISSION UNIT APPLICABLE REQUIREMENTS - Marble manufacturing Equipment

### Limitations

Conditions III.A.1.- 5. contain the control requirements. These are taken from the NSR permit issued 04/14/03.

Conditions III.A.6.- 9. contain the throughput limitations. These are taken from the NSR permit issued 04/14/03.

Conditions III.A.10. – 14. contain the emissions limitations. These are taken from the NSR permit issued 04/14/03. The limits for the NSR permit were based on the permitted throughput and the emission factors for styrene from open molding operations developed by the Composite Fabricators Association (CFA). These were published on July 23, 2001. Attachment A shows the permitted emissions calculations.

Conditions III.A.15. 16. Contain the opacity limitations. These are taken from the NSR permit issued 04/14/03.

## **Monitoring**

Condition III.A.5. requires a device to monitor pressure drop across the fabric filters.

Condition III.B. contains the opacity periodic monitoring. Monitoring of visible emissions will be required of the source (spray booth stacks 5 and 6 and sanding and grinding stacks 6 and 8) at least one time per week, when the units are operating. They are to observe for the presence of visible emissions from the stack. If visible emissions are observed, the permittee will have the option to take timely corrective action to resume operations without visible emissions or perform a VEE in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions compliance. The permittee will keep a log of observations, any VEE recordings, and any corrective actions. If the unit has not operated during the week, this fact shall be noted in the log, and that the visible emission observation was not required.

## **Recordkeeping**

Condition III.C. contains the record keeping requirements. These are taken from the NSR permit issued 04/14/03. The permit includes requirements for maintaining records of all monitoring and testing required by the permit.

## **Testing**

Condition III.D. states that the permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations. This is taken from the NSR permit issued 04/14/03. The permit does not require source tests. The Department and EPA has the authority to require testing, but stack testing is not required for this facility.

## **Reporting**

The only reporting that is required is in the General Conditions and that is stated below.

## **Streamlined Requirements**

There are no streamlined requirements

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

## **Comments on General Conditions**

### **B. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ' 2.1-20.01:2 and ' 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

The general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

The general conditions cites the sections that follow:

- B. 9 VAC 5-80-80. "Application"
- B.2. 9 VAC 5-80-150. "Action on Permit Applications"
- B.3. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-140. "Permit Shield"
- B.5. 9 VAC 5-80-80. "Application"

### **F. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

### **V. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition V and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

- V.2.d. 9 VAC 5-80-110. Permit Content
- V.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

## **STATE ONLY APPLICABLE REQUIREMENTS**

There are no state only requirements.

## **FUTURE APPLICABLE REQUIREMENTS**

The facility will be subject to Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production. The compliance date is April 21, 2006.

## **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Emission Unit No.	Emission Unit Description	Citation <sup>1</sup> (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity ( 5-80-720 C.)
5	Burnham hot water heater	5-80-720 B.	Sulfur dioxide and nitrogen dioxide	1.5 MMBTU/HR

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

## **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## **PUBLIC PARTICIPATION**

The draft permit was placed on public notice in the Kenbridge-Victoria Dispatch from May 28, 2003 to June 27, 2003 and no comments were received